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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/706,948	11/06/2000	Babak Hodjat	DEJI 1001-1	6014

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HAYNES BEFFEL & WOLFELD LLP.
P O BOX 366
HALF MOON BAY, CA 94019

EXAMINER

ZHEN, LI B

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 08/28/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/706,948

Applicant(s)

HODJAT, BABAK

Examiner

Li B. Zhen

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5, 6 6) ☐ Other: ____

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. The abstract included in this application exceeds 150 words in length. Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 5 – 8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 16 and 18 of U.S. Patent No. 6,144,989 to Hodjat in view of U.S. Patent No. 6,260,059 to Ueno.

As to claims 5, Hodjat teaches computer-implemented method for processing a subject message, by a network of agents including an originating agent [initiator agent]

and at least one agent downchain of said originating agent, each agent in said network having a view of its own domain of responsibility, comprising the steps of said originating agent [claim 1, lines 1 – 6]:

querying at least one of the agents downchain of said originating agent in said network a first time [claim 1, lines 7 – 8], whether the queried agent considers at least part of said subject message to be in the queried agent's domain of responsibility [claim 1, lines 8 – 10];

resolving any conflicting responses from said queried agents to identify a prevailing one of said downchain agents to whom said subject message should be passed [claim 1, lines 11 – 15]; and

instructing said prevailing agent to handle at least part of said subject message [claim 1, lines 16 – 17]. Hodjat does not specify a first depth-of-search indication.

However, Ueno teaches a first depth-of-search indication ["Count" is a number whose initial value determines the number of agents from which response information sets are to be obtained; column 21, lines 40 – 67].

It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the teaching of a depth-of-search indication as taught by Ueno to the invention Hodjat because the depth-of-search would indicate when the agent could stop querying [column 23, lines 15 – 20 and 45 – 55 of Ueno] and prevent the process from performing an infinite loop.

As to claim 6, Hodjat as modified teaches determining whether a depth of said first agent exceeds said depth-of search indication, and if so, disclaiming said subject message [see the rejection to claim 6 below].

As to claim 7, Hodjat as modified teaches further comprising the steps of a first one of said queried agents [claim 16, lines 1 – 3], in response to said query where a depth of said first agent does not exceed said depth of search indication [as to depth of search see the rejection to claim 5 above]:

determining whether at least part of said subject message is within said first agent's local domain of responsibility, and if so, returning a response to said originating agent claiming at least part of said message [claim 16, lines 4 – 8].

As to claim 8, Hodjat as modified teaches further comprising the steps of a first one of said queried agents [claim 18, lines 1 – 3], in response to said query where a depth of said first agent does not exceed said depth of search indication [as to depth of search see the rejection to claim 5 above]:

determining whether at least part of said subject message is within said first agent's local domain of responsibility [claim 16, lines 4 – 5]; and

where said subject message is not within said first agent's local domain of responsibility but said first agent has further agents downchain of said first agent, querying at least one of said further agents whether the further agent considers at least part of said subject message to be in the further agent's domain of responsibility [claim 16, lines 6 – 11].

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 – 18 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,260,059 to Ueno.

As to claim 1, Ueno teaches a subject message [messages] for use with a network of agents [knowledge provider agents which are mutually connected for exchange of messages; column 10, lines 60 – 67] each having a view of its own domain of responsibility [each of the agents has a preassigned identifier, i.e. a network ID, which for example may be linked to a unique address within one specific domain of the network; column 10, line 60 – column 11, line 5], comprising:

receiving from an upchain agent ["User" is the identifier of the requesting user; column 12, lines 22 – 23] a query [a string "ask", signifying that this is an information request message; column 12, lines 20 – 25] inquiring whether at least part of the subject message is within the domain of responsibility of the first agent [a message matching section 102-1 which is capable of registering a received message (passed from the message input section 101)...and which compares first the entire message, then

specific parts of the message, with predetermined parts of data which are held in the script storage section 103; column 11, lines 10 – 40];

querying at least one agent downchain [propagation destination agents] of the first agent whether the queried agent considers at least part of the subject message to be in the queried agent's domain of responsibility [the received message are supplied to the propagation message generating section 104, which originates a propagation message...containing the received message contents but is addressed to each of a predetermined plurality of other ones of the agents...such predetermined other ones of the agents will be referred to in the following as the propagation destination agents; column 11, lines 49 – 60];

responding to the upchain agent tentatively whether at least part of the subject message is within the domain of responsibility of the first agent [agent1...executes the next line of the script, and so performs successive Rule and Knowledge matching processing as described for the first embodiment, to obtain the response information set; column 22, lines 18 – 50], before the first agent receives all responses from the agents downchain of the first agent [next portion of the script is executed to generate an information collection message to be sent to one propagation destination agent; column 22, lines 30 – 67].

As to claim 5, Ueno teaches processing a subject message [messages] by a network of agents [knowledge provider agents which are mutually connected for exchange of messages; column 10, lines 60 – 67] including an originating agent ["User" is the identifier of the requesting user; column 12, lines 22 – 23] and at least one agent

downchain [propagation destination agents; column 11, lines 49 – 60] of the originating agent, each agent in the network having a view of its own domain of responsibility [each of the agents has a preassigned identifier, i.e. a network ID, which for example may be linked to a unique address within one specific domain of the network; column 10, line 60 – column 11, line 5], comprising:

querying at least one of the agents downchain [propagation destination agents] of the originating agent in the network a first time, whether the queried agent considers at least part of the subject message to be in the queried agent's domain of responsibility [the received message are supplied to the propagation message generating section 104, which originates a propagation message...containing the received message contents but is addressed to each of a predetermined plurality of other ones of the agents...such predetermined other ones of the agents will be referred to in the following as the propagation destination agents; column 11, lines 49 – 60], the first query including a first depth-of-search indication ["Count" is a number whose initial value determines the number of agents from which response information sets are to be obtained; column 21, lines 40 – 67];

resolving any conflicting responses from the queried agents to identify a prevailing one of the downchain agents to whom the subject message should be passed [each agent 600 includes a processing information request message generating section 507; column 20, line 61 – column 21, line 13]; and

instructing the prevailing agent to handle at least part of the subject message [If agentC achieves successful matching of the message contents with its script and

thereby obtains the necessary response information set, it generates a response message that is addressed to the agent which originated the received propagation message; column 12, lines 54 – 60].

As to claim 11, Ueno teaches processing a subject message [messages] by a network of agents [knowledge provider agents which are mutually connected for exchange of messages; column 10, lines 60 – 67] including an originating agent ["User" is the identifier of the requesting user; column 12, lines 22 – 23] and at least one agent downchain [propagation destination agents; column 11, lines 49 – 60] of the originating agent, each agent in the network having a view of its own domain of responsibility [each of the agents has a preassigned identifier, i.e. a network ID, which for example may be linked to a unique address within one specific domain of the network; column 10, line 60 – column 11, line 5], comprising:

querying at least one of the agents downchain [propagation destination agents] of the originating agent in the network a first time, whether the queried agent considers at least part of the subject message to be in the queried agent's domain of responsibility [the received message are supplied to the propagation message generating section 104, which originates a propagation message...containing the received message contents but is addressed to each of a predetermined plurality of other ones of the agents...such predetermined other ones of the agents will be referred to in the following as the propagation destination agents; column 11, lines 49 – 60];

subsequently querying the queried agents a second time whether the queried agent considers at least part of the subject message to be in the queried agent's domain

of responsibility [executing a second pattern matching of comparing said content portion of said message with the contents of said Rule segment; column 4, lines 39 – 56];

resolving any conflicting responses from the queried agents to identify a prevailing one of the downchain agents to whom at least part of the subject message should be passed [each agent 600 includes a processing information request message generating section 507; column 20, line 61 – column 21, line 13]; and

instructing the prevailing agent to handle at least part of the subject message [If agentC achieves successful matching of the message contents with its script and thereby obtains the necessary response information set, it generates a response message that is addressed to the agent which originated the received propagation message; column 12, lines 54 – 60].

As to claim 2, Ueno teaches the first agent responding further to the upchain agent whether at least part of the subject message is within the domain of responsibility of the first agent, after the first agent receives at least one additional response from the agents downchain of the first agent [agentC achieves successful matching of the message contents with its script and thereby obtains the necessary response information set, it generates a response message that is addressed to the agent which originated the received propagation message...when this message is received by agentA, that agent generates a response message addressed to the requesting user; column 12, line 54 - column 13, lines 10].

As to claims 3 and 4, Ueno teaches the first agent responding in response to a second query received by the first agent from the upchain agent inquiring whether at

least part of the subject message is within the domain of responsibility of the first agent [matching success is achieved for each of said first, second and third matching operations, generating a response message having said response information set as the content portion thereof and having the sender identifier of said received request message as the destination identifier thereof, and transmitting said response message via said network; column 3, lines 39 – 56].

As to claims 6 and 10, Ueno teaches determining whether a depth of the first agent [count value] exceeds the depth-of search indication [threshold value], and if so, disclaiming the subject message [since the count value at this stage reached the threshold value, agent2 will generate a response message conveying all of the appended response information sets, to be sent back to the "Sender" identified in the information collection message; column 23, lines 14 – 21].

As to claims 7 and 13, Ueno teaches determining whether at least part of the subject message is within the first agent's local domain of responsibility [a message matching section 102-1 which is capable of registering a received message (passed from the message input section 101)...and which compares first the entire message, then specific parts of the message, with predetermined parts of data which are held in the script storage section 103; column 11, lines 10 – 40], and if so, returning a response to the originating agent claiming at least part of the message [agent1...executes the next line of the script, and so performs successive Rule and Knowledge matching processing as described for the first embodiment, to obtain the response information set; column 22, lines 18 – 50].

As to claims 8 and 15, Ueno determining whether at least part of the subject message is within the first agent's local domain of responsibility [a message matching section 102-1 which is capable of registering a received message (passed from the message input section 101)...and which compares first the entire message, then specific parts of the message, with predetermined parts of data which are held in the script storage section 103; column 11, lines 10 – 40], and where the subject message is not within the first agent's local domain of responsibility but the first agent has further agents downchain of the first agent, querying at least one of the further agents whether the further agent considers at least part of the subject message to be in the further agent's domain of responsibility [if as a result of the matching processing it is found that the required knowledge information is not available, then the contents of the received message are supplied to the propagation message generating section 104, which originates a propagation message...addressed to each of a predetermined plurality of other ones of the agents; column 11, lines 48 – 62]

As to claim 9, Ueno teaches querying the agents downchain of the originating agent a second time whether the queried agent considers at least part of the subject message to be in the queried agent's domain of responsibility [executing a second pattern matching of comparing said content portion of said message with the contents of said Rule segment; column 4, lines 39 – 56].

As to claim 12, Ueno teaches the prevailing agent is a community of agents [a plurality of knowledge provider agents; column 3, lines 1 – 15].

As to claim 14, Ueno teaches determining whether at least part of the subject message is within the first agent's local domain of responsibility [a message matching section 102-1 which is capable of registering a received message (passed from the message input section 101)...and which compares first the entire message, then specific parts of the message, with predetermined parts of data which are held in the script storage section 103; column 11, lines 10 – 40], and where the subject message is not within the first agent's local domain of responsibility and the first agent has no further downchain agents, returning a response to the originating agent disclaiming the subject message [if complete matching is not successful...aliases contained in the Expansion segment are to be successively inserted into predetermined fields of the content format descriptor in the Rule segment, with the matching processing being sequentially repeated using these aliases until complete matching successful is achieved or all of the aliases have been tried; column 24, lines 50 - 60].

As to claim 16, Ueno teaches providing to each of the queried agents a first depth-of-search indication for the subject message [information collection request message having the format: "ask_all(User,Agent,Count,Order)"..."Count" is a number whose initial value determines the number of agents from which response information sets are to be obtained; column 21, lines 52 – 67], and wherein the step of querying a second time comprises the step of providing to each of the queried agents a second depth-of-search indication for the subject message, the second depth-of-search indication indicating a deeper search than the first depth-of-search indication [the value of Count is decremented by 1, i.e. NewCount takes the value 1 (step S6 in FIG. 23). In

that case, the next portion of the script is executed to generate an information collection message to be sent to one propagation destination agent; column 22, lines 33 – 50].

As to claim 17, this is a combination of claims 13 and 15; note the rejections to claims 13 and 15 above.

As to claim 18, Ueno teaches receiving a group of at least one response [response information set] from the further agents downchain of the first agent, in response to the step of querying the further agents [agentC achieves successful matching of the message contents with its script and thereby obtains the necessary response information set, it generates a response message that is addressed to the agent which originated the received propagation message; column 12, line 54 – column 13, line 10], and returning a response to the originating agent in response to the step of receiving [when this message is received by agentA, that agent generates a response message addressed to the requesting user; column 12, line 54 - column 13, line 10].

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,192,354 to Bigus teaches a plurality of intelligent agents suited to perform a computer task but having varied degrees of domain knowledge.

U.S. Patent No. 6,330,586 to Yates teaches a software infrastructure divided into domains, an intelligent agent in each domain, and the community of agents co-operates to provide service and service management functionality.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (703) 305-3406. The examiner can normally be reached on Mon - Fri, 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Li B. Zhen
Examiner
Art Unit 2126

lbz
August 21, 2003


**JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**